foxtrot_xray->resonator()

Tutorial 1

© 2006 foxtrot_xray:software

Required materials

If you wish to follow along with the tutorial, you must acquire the compressed file available at the following address:

http://foxtrot-xray.com/tutorials/resonator-tutorial-1.zip

This file contains the After Effects project and all files required by the tutorial. For the purpose of this tutorial, we will assume that you have extracted the contents of the Zip-compressed file to the c:\resonator-tutorial-1 folder.

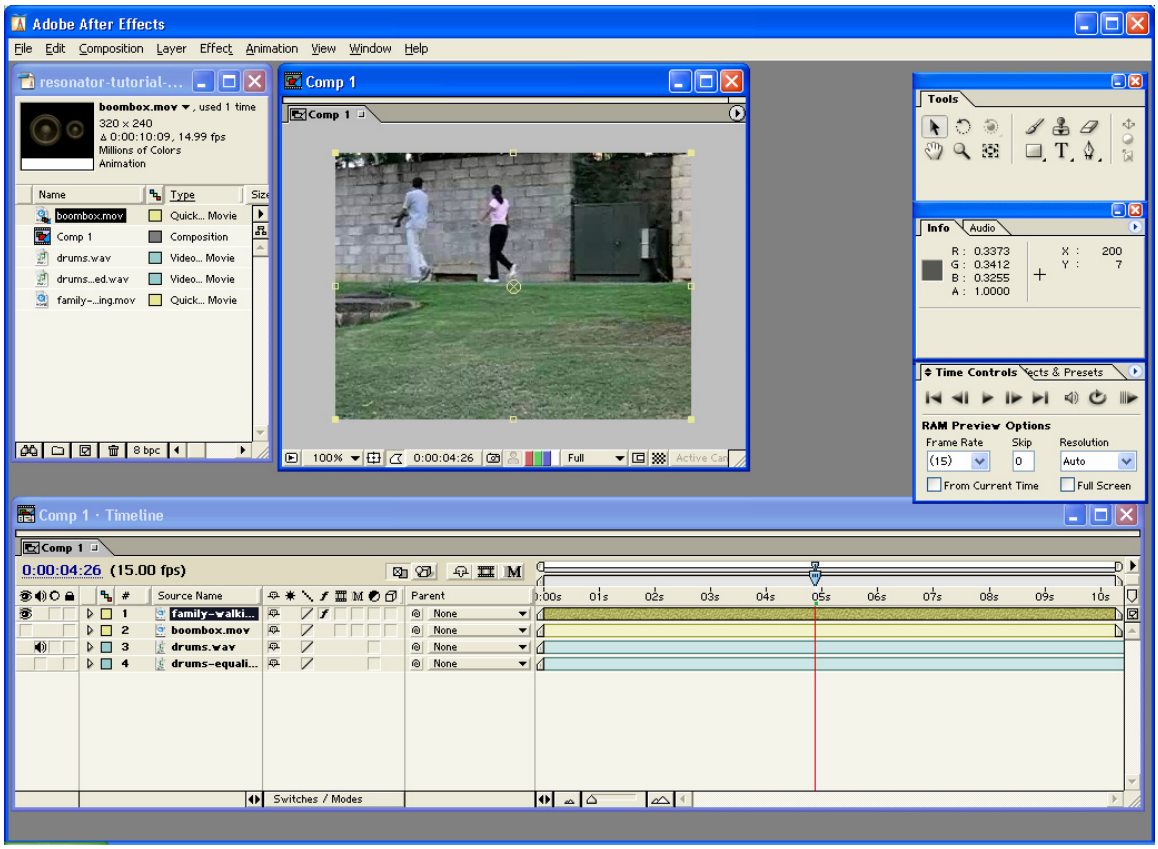
You may download the demo version of the resonator() plugin at the following address:

http://foxtrot-xray.com/demo/resonator-demo.zip

Tutorial 1: Boombox

This simple tutorial will show you how to make your videos pulsate to a drum-machine-generated beat. Although we will only use the Bulge effect during this tutorial, you may apply the same techniques to any effect you like.

Let’s start by locating the c:\resonator-tutorial-1 folder and opening our After Effects project, named resonator-tutorial-1.aep.

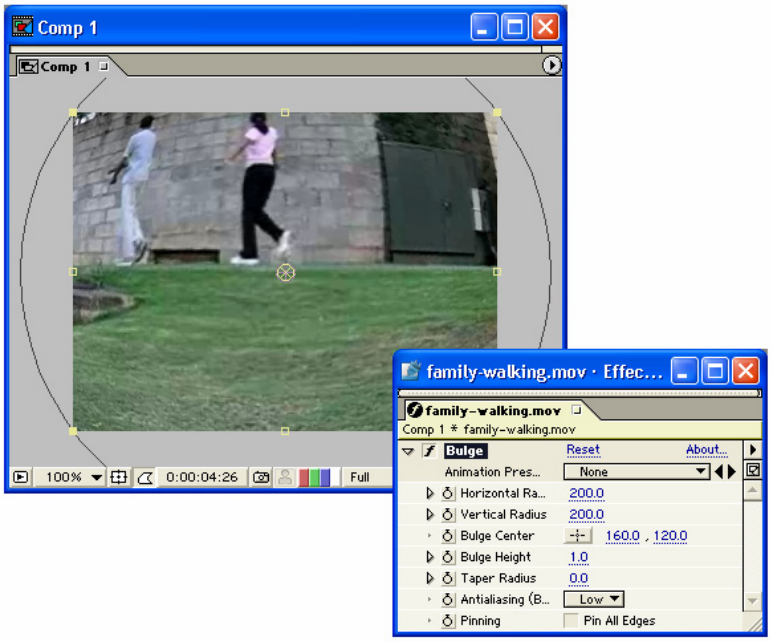


We see our main composition, which has 4 footage elements, the first, and currently visible being a short clip of a family walking past the camera. You will notice at the bottom two audio clips, one of them muted and one of them audible. Let’s begin!

First, we should select the Bulge effect, found in Effect | Distort | Bulge.



Let’s fix our Bulge radius so that the effect alters the entire composition. We should set the Horizontal and Vertical radius to 200 pixels. We will leave the Bulge Height as is, since resonator() will be setting the values for this parameter.



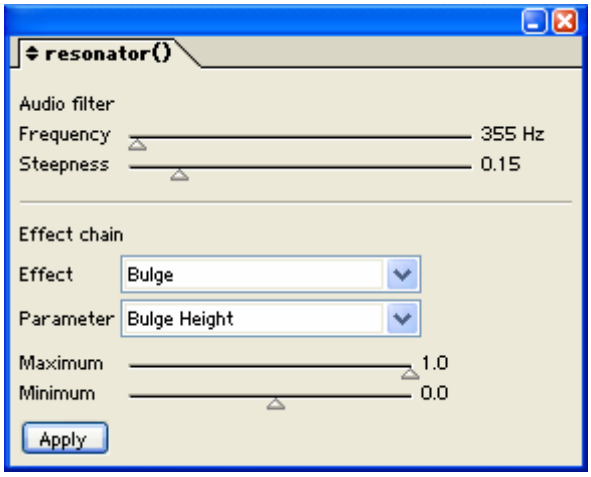
Click on Animation | Keyframe Assistant | resonator(). The resonator() dialog appears.

Now, let's select a frequency around 300, and a steepness of 0.15. In the Effect box, let's select Bulge, and in the Parameter box, let's select Bulge Height.

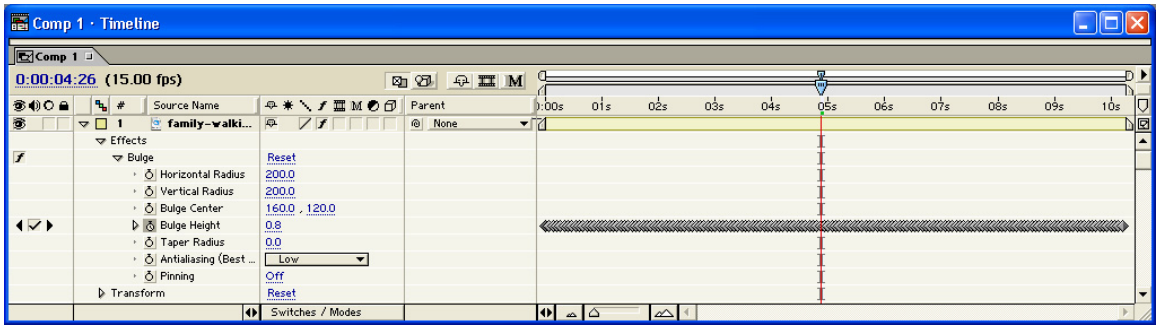
For Maximum, we will be using a value of 1. This is the value that resonator() will use for the maximum volume of the selected frequency.

For Minimum, we will be using a value of 0. This is the value that resonator() will use for the minimum volume of the selected frequency.

foxtrot_xray:software
resonator() tutorial 1

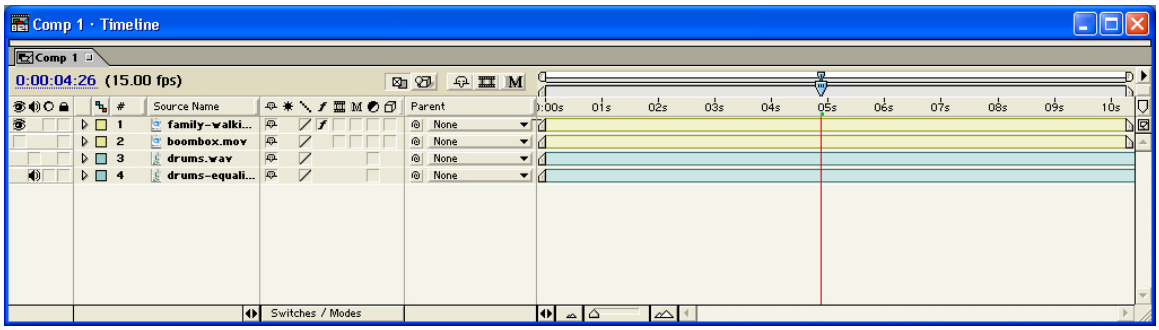


Click on Apply. resonator() creates keyframes for the effect based on the audio in the composition. Do remember that resonator() will only use the audio currently audible in the composition, so you can mute any footage you do not want affecting your effect. Preview the composition now, to see how the audio has affected the parameter's values.

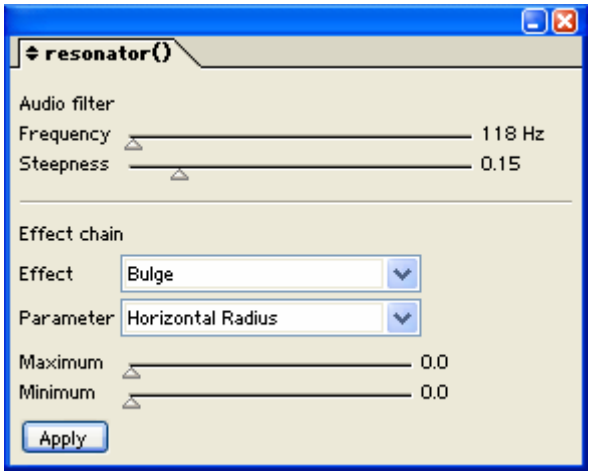


Sometimes, you might want to have your effects react to a particular element in your sound, say, an instrument, or a particular voice. In that case, the use of a sound editor to remove unwanted elements yields the best results. In our case, we want the Bulge effect to be affected only by the bass drum in the sound clip.

Find the clip called drums-equalized.wav in the timeline and unmute it, then mute the clip called drums.wav. The drums-equalized.wav clip contains the same beat, but filtered so that we can only hear the bass drum.

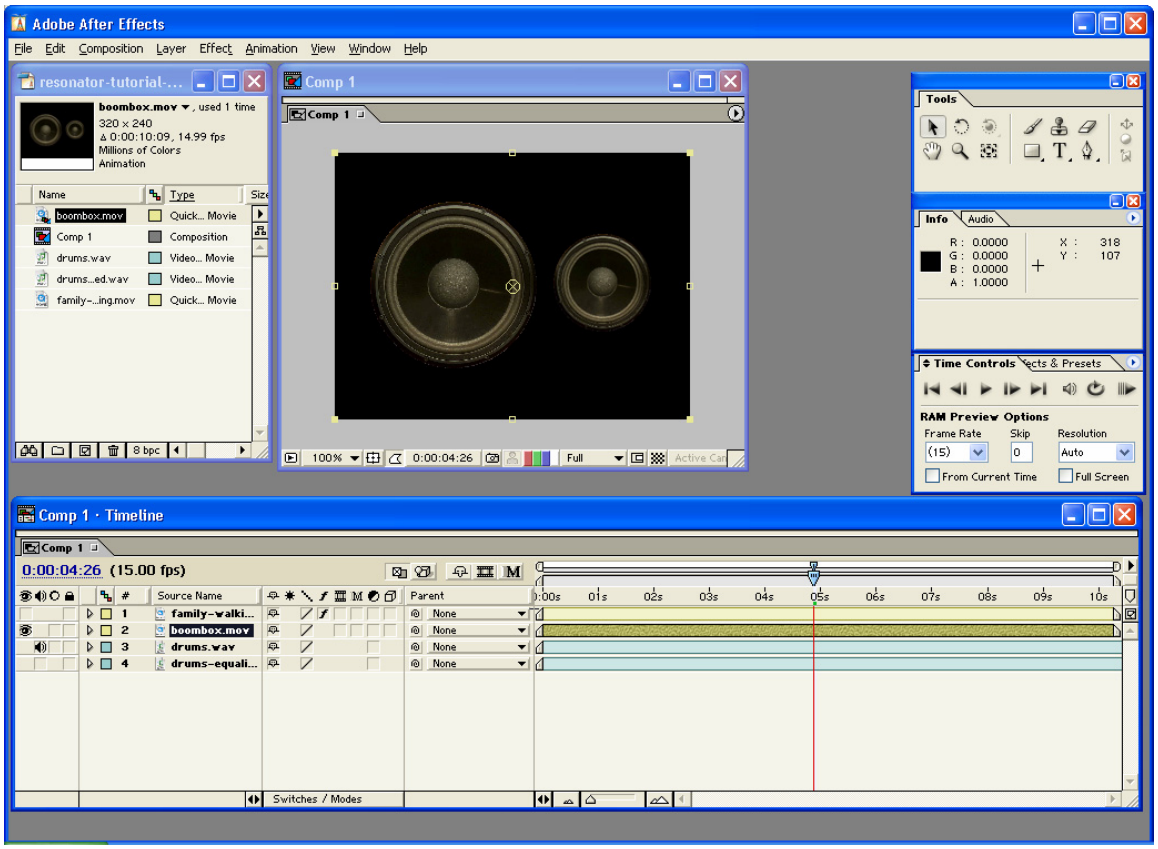


Select the family-walking layer, and open the resonator() window. Select a frequency of around 100 Hz, a steepness of 0.2, the Bulge effect, and the Bulge Height parameter. Set the Maximum value to 1 and the Minimum to 0. Click on Apply.



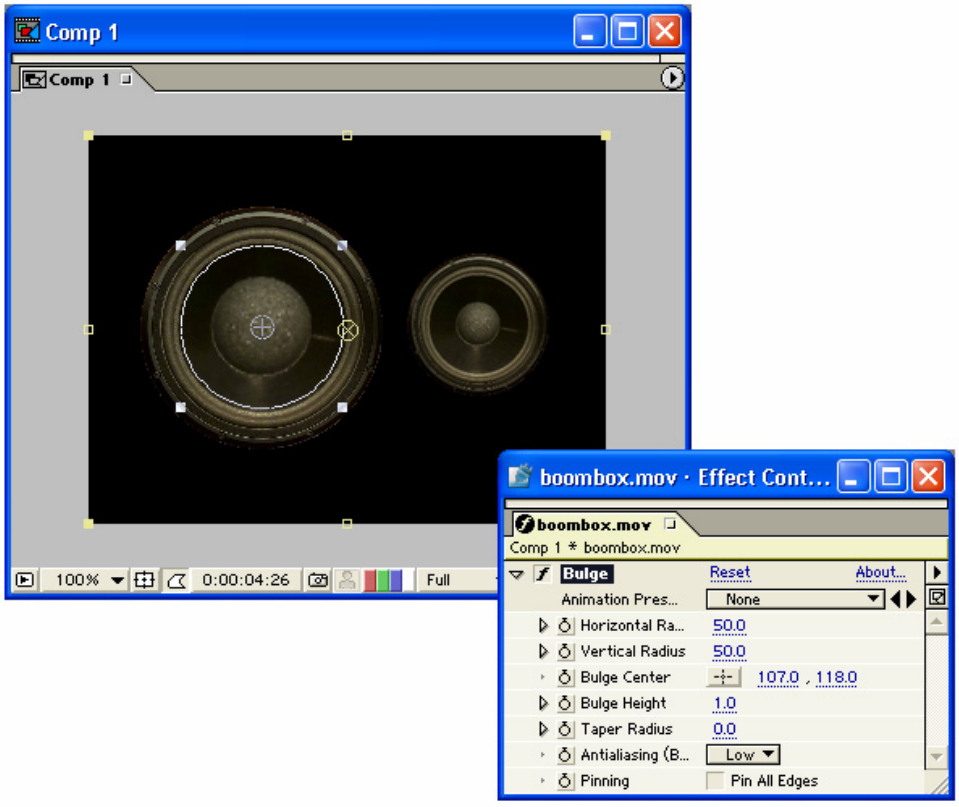
You may mute drums-equalized.wav and unmute drums.wav. Preview the clip, and notice how the effect now only responds to the bass drum.

Now this may have been a lot of fun, but we promised you a boombox. Find the boombox.mov layer and make it visible. Make the family-walking.mov layer invisible. Behold two speakers.

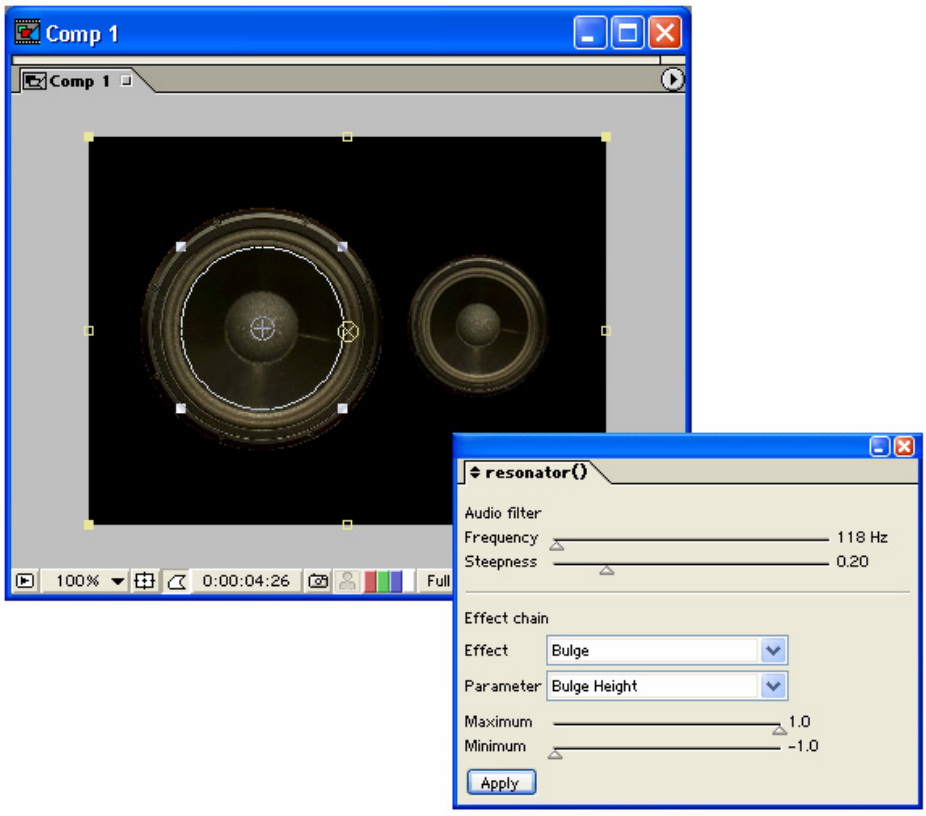


What we are going to try to do now, is make the woofer resonate only with the bass drum, and the tweeter resonate with the rest of the audio material. Let’s play with the woofer first.

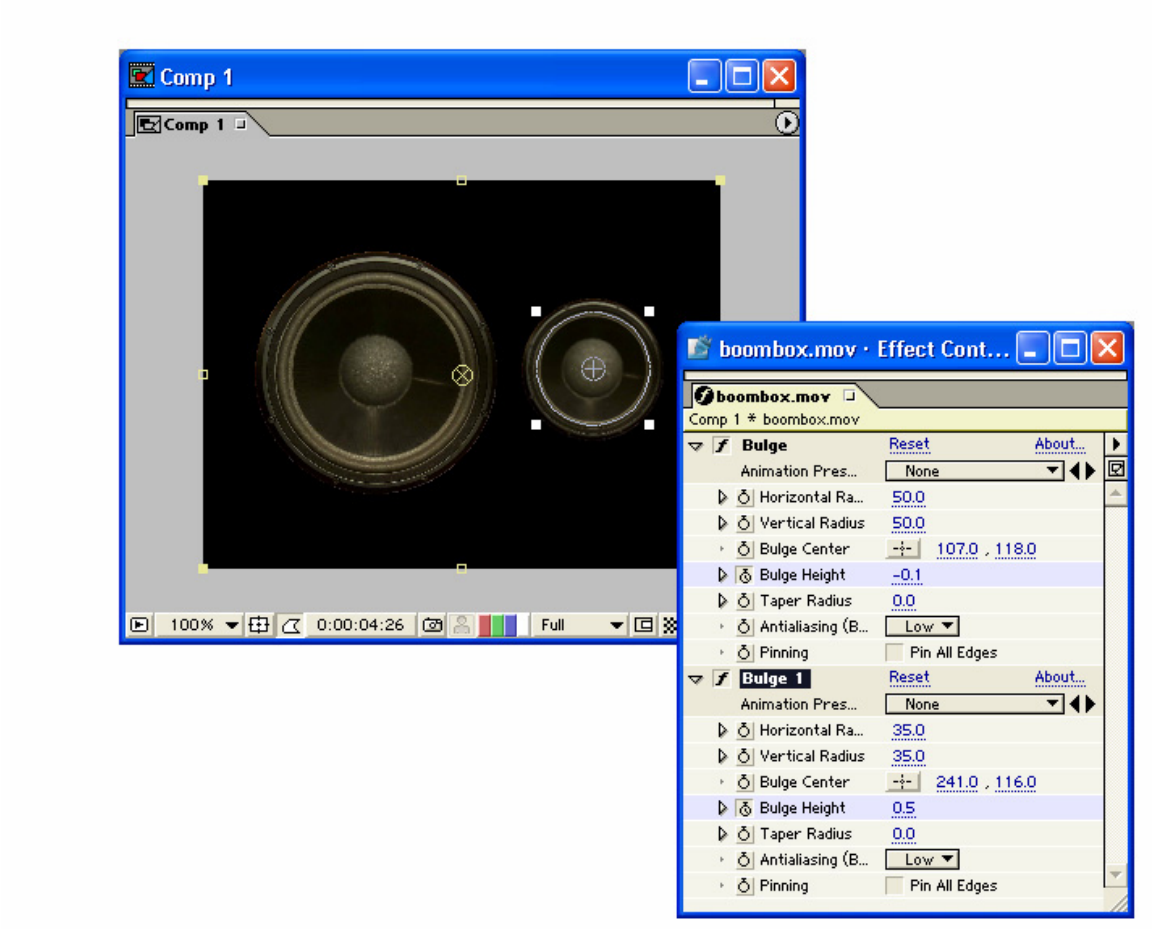
Add a Bulge effect to the boombox.mov layer, and set the Horizontal and Vertical radius to 50 pixels. Move the Bulge effect's center so that it is centered inside the woofer's speaker cone.



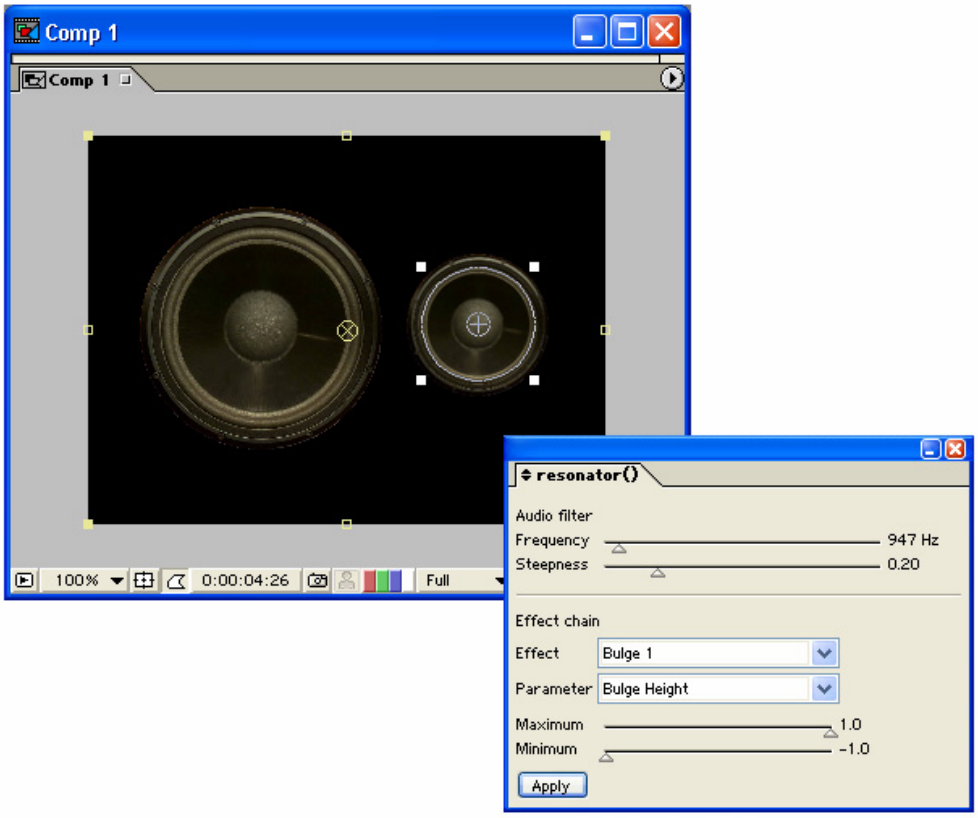
Now mute drums.wav, unmute drums-filtered.wav, and bring up resonator(). Select a frequency around 100 Hz, a steepness of 0.2, the Bulge effect, and the Bulge Height parameter. Set the Maximum value to 1, and the minimum to -1. Click on Apply.



Add a second Bulge effect to the boombox.mov layer, and set the Horizontal and Vertical radius to 35 pixels. Move the Bulge effect's center so that it is centered inside the tweeter's speaker cone.



Now mute drums-filtered.wav, unmute drums.wav, and bring up resonator(). Do notice that there is more than one effect available in resonator()'s effect list. Select the second effect from the list, which is named Bulge 1. Select the Bulge Height parameter, set the frequency to around 900 Hz, steepness to 0.2, Maximum to 1, and Minimum to -1. Click on Apply.



Now preview your composition. You will see both cones reacting to the sound in the composition. Now it’s your turn to go out there and kick it up a notch.

(Bam!)